

ABSTRACT

Background

The aim of the study is to evaluate and weigh the pros and cons of three different transducer views, short, long and oblique axis in ultrasonogram guided internal jugular venous cannulation in patients posted for cardio thoracic surgeries.

Method

A total of 150 ASA PS-II patients of various sex, age above 18 years were divided into three groups n=50 short, n=50 long and n=50 oblique. The first needle pass success rate, number of needle passes, cannulation time in seconds, mechanical complications like posterior venous wall puncture, carotid artery puncture and hematoma formation are measured for all the patients.

Results

On analysis, in view of first needle pass success rate, first pass success rate, number of needle passes, cannulation time in seconds, oblique axis and short axis is better than long axis. In view of posterior venous wall puncture, oblique and long axis is better than short axis. oblique and short axis has lower carotid artery puncture and hematoma formation than long axis.

Conclusion

From above statistical study, after weighing the pros and cons of three transducer views of ultrasound guided internal jugular venous cannulation in cardiothoracic surgical patients, it is concluded that oblique axis is predecessor to short and long axis by taking first needle pass success rate, number of needle passes, cannulation time in seconds and reduced complications into account.